

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)  
Space Workforce Development - Problems Encountered and Resolutions (7)

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ENGAGING HIGH-PERFORMING GENERATION Y STUDENTS TO REVITALIZE THE NASA  
WORKFORCE

**Abstract**

As NASA prepares to develop and deploy a next generation of space vehicles, the Agency requires greater depth of knowledge and pursuit of innovation than ever before. NASA now faces a critical juncture regarding the science, technology, engineering, and mathematics (STEM) workforce needed to navigate its science and exploration missions. One significant concern is the aging of the current workforce, including the increasing loss of historical technical knowledge and intellect of the Agency's retiring "baby boomers". Conversely, the inadequate representation in NASA's workforce of 18-to-30 year-olds (Generation Y) presents an enormous challenge.

An infusion of scientists and engineers from the next generation will address both of these concerns. NASA must avert its looming technical void with a pool of individuals who are diverse, dynamic, experienced, and technically adept. As stated in the National Academy of Sciences report, "Meeting the Workforce Needs for the National Vision for Space Exploration," NASA's attention to workforce development needs a more outward approach that focuses on making jobs more attractive to target populations like Generation Y.

New strategies to involve these students must factor in generational issues, competition from other industries, and continuing breakthroughs in information technology and communication. Furthermore, initiated NASA students will require increasing levels of interaction and preparation to be ushered through the entire NASA education pipeline. Ultimately, NASA needs to attract and retain larger numbers of high-performing students from a wide range of backgrounds, interact with them on their terms, and foster loyalty that will result in employment.

To achieve this, the Agency is developing a new online initiative, NASA Student Ambassadors Virtual Community (NSAVC) that will engage high-performing Generation Y NASA interns and fellows, elevate their experiences and contributions, and leverage their presence and input in the Agency workforce pipeline. The NSAVC will serve as an outreach vehicle to the Nation's exceptional STEM students through blogs, networking, information sharing, resources, multimedia, contact with NASA experts, e-mentoring, and collaboration with Agency leaders. The community will depend heavily on input from the students, while focusing on resources to help them in research and career experiences leading to opportunities for entrance into the aerospace workforce.

This innovative activity will be a foremost effort to help NASA attract, engage, educate, and employ this dynamic generation. To ensure success in meeting its goals, the Agency is adapting to the changing landscape and developing new strategies to cultivate its future workforce.